

Subject: Mathematics

Grade: First

Standard: #3 Fractions and Decimals

Key Concept: Shapes can be divided into many different equal parts.

Generalization: Use paper food objects to illustrate how fractions represent parts of a whole and how to divide food equally among many.

Background:

Before beginning this activity, fractions have been introduced and illustrated by the students with pictures and/or manipulatives. Students who have illustrated a minimal understanding of halves and thirds should be placed in the **Basic** tier. Those who show an understanding of halves, thirds, and fourths should be placed in the **Grade Level** tier. Students who have demonstrated an understanding of halves, thirds, fourths, and eighths should complete the activities in the **Advanced** tier.

This lesson is tiered in **content** according to **readiness**.

Tier I: **Basic Learners**

Using paper circles (pizza) and squares (sandwich), in pairs students determine how to share the food equally and illustrate by folding the paper.

Have two pairs determine how they can share equally with four people. They can cut the parts and stack them to see if they match.

Have the quad repeat the process for sharing a paper Reese Peanut Butter Cup equally with three people.

Tier II: **Grade Level Learners**

Using paper circles (pizza) and squares (sandwich), in triads have students determine how to share the food equally and illustrate by folding the paper.

If social skills permit, have two triads determine how they can share equally with six people. Otherwise, have a single triad determine how they can share

equally with six people.

Have the group of six repeat the process for sharing a paper Birthday Cake with twelve people. In each case, they can cut the parts & stack to match. Have the group start with half a cake and divide equally for 3, 6, and 12 people.

### Tier III: *Advanced Learners*

Using paper rectangles (sandwich) and triangles (slice of pie), in pairs have students determine how to share the food in three different ways to get equal parts. Have them illustrate by folding the paper. The pair should also answer the questions: Are there other different ways to divide each shape equally? How many ways are there?

Have the pair determine which shapes - circles, squares, rectangles, triangles- are easier to divide evenly and illustrate why with a particular food of their choice.

### Assessment:

Teacher should use a summative assessment noting students' abilities to divide materials into equal parts and to recognize and check for equal sizes. Can the student explain how many equal parts there are and show how they know the parts are equal?